

Title (en)
INSULATOR WITH RESISTIVITY GRADIENT

Title (de)
ISOLATOR MIT WIDERSTANDSGRADIENT

Title (fr)
ISOLANT A GRADIENT DE RÉSISTIVITÉ

Publication
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Application
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Abstract (en)
The present invention relates to a composite insulator (1) and a method for producing the same. The composite insulator (1) comprises an insulating elongated core (2), a protective layer (3) surrounding the elongated core (2), the protective layer (3) comprising an outer surface (4) with a shed profile and an adhesive primer layer (5) disposed between the elongated core (2) and the protective layer (3) for adhering the protective layer (3) to the elongated core (2), the adhesive primer layer (5) comprising a coupling agent (6) and particles (7) of a low resistivity material. The method for producing a composite insulator (1) comprises preparing a first solution comprising a solvent, a coupling agent (6) and particles (7) of a low resistivity material, applying the first solution on at least a part of an envelope surface of an insulating elongated core (2) and thus forming one or more first adhesive primer layers (5) and applying a protective layer (3) onto the first adhesive primer layer (5) on the elongated core (2), wherein the protective layer (3) comprises an outer surface (4) with a shed profile.

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Citation (applicant)
• US 2011017488 A1 20110127 - DENNDOERFER HEINZ [DE], et al
• DE 102012104137 A1 20131114 - REINHAUSEN MASCHF SCHEUBECK [DE]

Citation (search report)
• [X] JP 2001126562 A 20010511 - FURUKAWA ELECTRIC CO LTD, et al
• [A] EP 1577904 A1 20050921 - ABB RESEARCH LTD [CH]
• [AD] US 2011017488 A1 20110127 - DENNDOERFER HEINZ [DE], et al
• [A] JP H11273474 A 19991008 - NGK INSULATORS LTD

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